Health Sciences 3801b  
Measurement and Analysis in Health Sciences  
School of Health Studies, Western University  

January to April 2015

1. Course Information

This course is an introduction to statistical analysis in health sciences research. Although formulas are given and calculations are performed, the principal orientation of the course is conceptual rather than mathematical. Your grade in this course is based on three quizzes and a final exam.

Classes – 2 hours  
Fridays, 9:30 to 11:30, NS 1

Prerequisite Checking  
You should consult the Western Academic Calendar (www.westerncalendar.uwo.ca) for the requisites of this course. Unless you have either the requisites for this course or written special permission from your Dean to enrol in it, you may be removed from this course and it will be deleted from your record. This decision may not be appealed. You will receive no adjustment to your fees in the event that you are dropped from a course for failing to have the necessary prerequisites.

2. Instructor Information

Christopher Lee, PhD  
email: cjlee@uwo.ca  
Office: Room 217, Labatt Health Sciences Building  
Office Hours: TBA

3. Course Materials

There is no textbook to be purchased for this course. I have prepared a set of PDF readings to accompany the classes, and these readings are posted in OWL. Each reading provides a short introduction to the topic and includes a series of cases that we will work through in class.

4. Evaluation

Your grade in this course is based on three online quizzes and a final exam. Each quiz is worth 18 percent of your course grade, and the final exam is worth 46 percent of your course grade. The quizzes and exam are composed of calculation questions and thought questions. The calculation questions test your ability to perform the numerical procedures presented in the readings. The thought questions test your understanding of the concepts and general principles presented in the readings.
The quizzes are one-hour in length, and they are administered online using OWL. Each quiz will be open for a two-day period. You can login to OWL at any time during the two-day period to complete the quiz. The schedule of quizzes is listed in the course schedule section (below). The first quiz covers readings 1 and 2, the second quiz covers readings 1 to 3, and the third quiz covers readings 1 to 4. The final exam covers readings 1 to 5, and it is scheduled during the official examination period. The quizzes are open-book in the sense that you have access to your notes and the readings while completing the quiz. I expect you to complete the quizzes on your own, without collaboration with other students.

If you are unable to complete a quiz during the scheduled time as a result of medical illness or non-medical reasons, you must consult an academic counsellor to obtain academic accommodation. Once academic accommodation is obtained, the percentage associated with the missed quiz will be evenly distributed among the other quizzes and the final exam. For example, if you were unable to complete the first quiz because of illness, the second quiz would be worth 24 percent (i.e., 18% + 6%), the third quiz would be worth 24 percent (i.e., 18% + 6%), and the final exam would be worth 52 percent (i.e., 46% + 6%).

If you miss the final exam due to medical illness or non-medical reasons, you must consult an academic counsellor to obtain academic accommodation to write a make-up exam.

5. Student Code of Conduct
The purpose of the Code of Student Conduct is to define the general standard of conduct expected of students registered at The University of Western Ontario, provide examples of behaviour that constitutes a breach of this standard of conduct, provide examples of sanctions that may be imposed, and set out the disciplinary procedures that the University will follow. For more information, visit http://www.uwo.ca/univsec/board/code.pdf.

6. English Proficiency for the Assignment of Grades
The University policy on English proficiency is available at http://www.uwo.ca/univsec/handbook/exam/english.pdf.

7. Accommodation for Medical Illness or Non-Medical Absences
The University recognizes that a student’s ability to meet his/her academic responsibilities may, on occasion, be impaired by medical illness. Illness may be acute (short term), or it may be chronic (long term), or chronic with acute episodes. The University further recognizes that medical situations are deeply personal and respects the need for privacy and confidentiality in these matters. However, in order to ensure fairness and consistency for all students, academic accommodation for work representing 10% or more of the student’s overall grade in the course shall be granted only in those cases where there is documentation indicating that the student was seriously affected by illness and could not reasonably be expected to meet his/her academic responsibilities.

A UWO Student Medical Certificate (SMC) is required where a student is seeking academic accommodation. This documentation should be obtained at the time of the initial consultation with the physician or walk-in clinic. An SMC can be downloaded under the Medical
Documentation is required for non-medical absences where the course work missed is more than 10% of the overall grade. Students may contact their Faculty Academic Counselling Office for what documentation is needed.

Whenever possible, students who require academic accommodation should provide notification and documentation in advance of due dates, examinations, etc. Students must follow up with their professors and their Academic Counselling office in a timely manner.

Documentation for any request for accommodation shall be submitted, as soon as possible, to the appropriate Academic Counselling Office of the student’s Faculty of registration — Health Studies students should contact the School of Health Studies main office (222 HSB).

8. Scholastic Offences
Scholastic offences are taken seriously and students are directed to read the appropriate policy, specifically, the definition of what constitutes a Scholastic Offence, at the following Web site: http://www.uwo.ca/univsec/handbook/appeals/scholastic_discipline_undergrad.pdf.

9. Support Services
Support services are offered on campus through the Student Development Centre, Student Health Services, the Office of the Registrar, and the Office of the Ombudsperson.

10. Course Schedule

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<th>Date</th>
<th>Topic</th>
<th>Online Quizzes (Open)</th>
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<td>Course Overview</td>
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<td>2</td>
<td>Jan 16</td>
<td>Scores (Reading 1)</td>
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<td>3</td>
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<td>Simple Regression (Reading 2)</td>
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<td>4</td>
<td>Jan 30</td>
<td>Simple Regression (Reading 2)</td>
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<td>5</td>
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<td>6</td>
<td>Feb 13</td>
<td>Uncertainty (Reading 3)</td>
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<td>Feb 20</td>
<td>No Class — Reading Week</td>
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<td>7</td>
<td>Feb 27</td>
<td>Multiple Regression (Reading 4)</td>
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<td>8</td>
<td>Mar 6</td>
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<td>12</td>
<td>Apr 3</td>
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